

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

December 14, 2009

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL AND FEDERAL EXPRESS

Mr. Terry Coss
Environmental Director
Xcel Energy
414 Nicollet Mall
Minneapolis, Mn. 55401-1993

Dear Mr. Coss:

On September 16-17, 2009 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Sherburne County facility. The purpose of this visit was to assess the structural stability of the impoundments or other similar management units that contain "wet" handled CCRs. We thank you and your staff for your cooperation during the site visit. Subsequent to the site visit, EPA sent you a copy of the draft report evaluating the structural stability of the units at the Sherburne County facility and requested that you submit comments on the factual accuracy of the draft report to EPA. Your comments were considered in the preparation of the final report.

The final report for the Sherburne County facility is enclosed. This report includes a specific rating for each CCR management unit and recommendations and actions that our engineering contractors believe should be undertaken to ensure the stability of the CCR impoundment(s) located at the Sherburne County facility. These recommendations are listed in Enclosure 2.

Since these recommendations relate to actions which could affect the structural stability of the CCR management units and, therefore, protection of human health and the environment, EPA believes their implementation should receive the highest priority. Therefore, we request that you inform us on how you intend to address each of the recommendations found in the final report. Your response should include specific plans and schedules for implementing each of the recommendations. If you will not implement a recommendation, please explain why. Please provide a response to this request by January 15, 2010. Please send your response to:

Mr. Stephen Hoffman
US Environmental Protection Agency (5304P)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

If you are using overnight or hand delivery mail, please use the following address:

Mr. Stephen Hoffman
US Environmental Protection Agency
Two Potomac Yard
2733 S. Crystal Drive
5th Floor, N-237
Arlington, VA 22202-2733

You may also provide a response by e-mail to hoffman.stephen@epa.gov

This request has been approved by the Office of Management and Budget under EPA ICR Number 2350.01.

You may assert a business confidentiality claim covering all or part of the information requested, in the manner described by 40 C. F. R. Part 2, Subpart B. Information covered by such a claim will be disclosed by EPA only to the extent and only by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when EPA receives it, the information may be made available to the public by EPA without further notice to you. If you wish EPA to treat any of your response as "confidential" you must so advise EPA when you submit your response.

EPA will be closely monitoring your progress in implementing the recommendations from these reports and could decide to take additional action if the circumstances warrant.

You should be aware that EPA will be posting the report for this facility on the Agency website shortly.

Given that the site visit related solely to structural stability of the management units, this report and its conclusions in no way relate to compliance with RCRA, CWA, or any other environmental law and are not intended to convey any position related to statutory or regulatory compliance.

If you have any questions concerning this matter, please contact Mr. Hoffman in the Office of Resource Conservation and Recovery at (703) 308-8413. Thank you for your continued ongoing efforts to ensure protection of human health and the environment.

Sincerely,
/Matt Hale/, Director
Office of Resource Conservation and Recovery

Enclosures

4.2 Animal Control and Filling of Existing Animal Burrows

Evidence of animal burrows was observed on the embankment slopes of the Bottom Ash Pond, Pond No. 1, Pond No. 2 and Pond No. 3 dams. A 4.5-foot deep animal burrow was observed on the South Dam embankment approximately two-thirds the distance along the dam that needs to be repaired. At approximately three-quarter distance from southwest corner of the Pond No. 1 West Dam a 6-foot wide, 2-foot deep gulley formed in surface of slope in area of surface undulation that also needs to be repaired. CHA recommends vigilance by Northern States Power Company to make note of areas disturbed by animal activity, trapping of the animals, and repair to the areas to protect the integrity of the dams. In addition, noting the locations that have been repaired will provide a record which can be used to more easily identify active versus inactive animal burrows (i.e. stable versus potentially changing conditions).

4.3 Maintaining Vegetation Growth

Appropriate grass covered most of the dams. However, there were areas of sparse vegetation where reseeding maintenance should be performed. Northern States Power Company should perform reseeding as required yearly to maintain a good grass cover on the dams.

4.4 Erosion Protection and Repair

Erosion rills, sinkholes and subsequent loss of grass cover were observed on embankment slopes. Thinning and loss of grass cover due to concentrated flow from the access roads was noted. On the South Dam of Pond No. 1 a 48-inch wide by 3-foot deep sinkhole was observed that needs to be repaired. CHA recommends filling all rills and sinkholes and reseeding these areas.

4.5 Drainage Swale Maintenance

Vegetation was evident in some of the rip rap drainage swales to the toe of the downstream embankment slopes. Northern States Power Company should monitor the condition of these drainage swales and if the vegetation appears to be clogging the rip rap and impeding surface runoff from being adequately conveyed away from the earthen embankments, the vegetation should be removed from rip rap.

4.6 Tree and Root Removal

Tree roots were observed on the Pond No. 1 South Dam. CHA recommends that Northern States Power Company, monitor the areas where tree roots are left in place following the cutting of trees for signs of tree roots sprouting and instability in the embankment slope surface due to root ball decay. Similarly, trees have established themselves in Pond No. 2 East Dam slope in the area of future Pond No. 3S. CHA recommends these trees be removed under the direction of a professional engineer.

4.7 Inspection Recommendations

CHA recommends that Northern States Power Company implement procedures for routine inspections of the Bottom Ash, Pond No. 1, Pond No. 2 and Pond No. 3. The Operations and Maintenance Plan for Pond No. 2 prepared by Barr Engineering Company and submitted to MN DNR as part of the Application for Amendment of NPDES Permit No. 0002186 in January 1995 is a good document for the facility to refer to for performing these inspections. The manual outlines monthly or semiannual (twice a year) visual observations that should be performed. Table 3 in the manual lists items which should be inspected monthly (i.e. adequate slope maintenance, adequate liner protection/erosion control, adequate freeboard, adequate surface water drainage, vector/rodent control, dust control, dam integrity, adequate vegetation on cover, adequate erosion control on cover, signs of seepage on perimeter dams, sudden drops in pond

level) and Table 4 lists items which should be inspected semiannually and after severe rainfall events (i.e., groundwater monitoring points, final cover integrity, surface water drainage system, dewatering system, survey monuments, perimeter dams and haul roads, sedimentation basin build up). The results of the routine inspections should be documented in an inspection log and maintained at the facility.